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TOWNSEND and TOWNSEND and CREW LLP

By: Masha M. Martenish

PATENT
Attorney Docket No.: 018563-004620US
Client Reference No.: AT00069.2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

ELENA PAVLOVSKAIA et al.

Application No.: 10/670,162

Filed: September 23, 2003

For: EFFICIENT DATA
REPRESENTATION OF TEETH
MODEL

Customer No.: 20350

Confirmation No.: 2838

Examiner: Ayal I. Sharon

Art Unit: 2123

**SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER
37 CFR §1.97 and §1.98**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached forms PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner.

Copies of the foreign and non-patent documents are enclosed in compliance with the requirements of 37 CFR §1.98(a)(2).

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

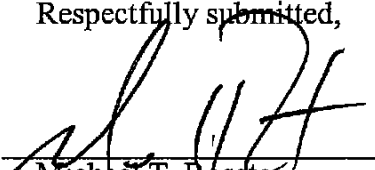
The present application is a continuation application of U.S. Patent Application No. 10/241,240, filed September 10, 2002, which issued as U.S. Patent No. 6,665,570 (Attorney Docket No. 18563-004610) (cited herewith).

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Date: 1/10/2007

Respectfully submitted,

By: Michael T. Rosato
Reg. No. 52,182

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/670,162
				Filing Date	September 23, 2003
				First Named Inventor	PAVLOVSKAIA, ELENA
				Art Unit	2123
				Examiner Name	Ayal I. Sharon
Sheet	1	of	5	Attorney Docket Number	018563-004620US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-5,107,444	04-21-1992	Wu	
	AB	US-5,590,248	12-1996	Zarge et al.	
	AC	US-5,882,192	03-1999	Bergerson	
	AD	US-6,015,289	01-2000	Andreiko et al.	
	AE	US-6,044,309	03-2000	Honda	
	AF	US-6,049,743	04-2000	Baba	
	AG	US-6,054,990	05-11-1999	Stewart et al.	
	AH	US-6,205,243	03-2001	Migdal et al.	
	AI	US-6,210,162	04-2001	Chishti et al.	
	AJ	US-6,212,442	04-03-2001	Andersson et al.	
	AK	US-6,217,334	04-17-2001	Hultgren	
	AL	US-6,244,861	06-12-2001	Andreiko et al.	
	AM	US-6,300,958	10-09-2001	Mallet	
	AN	US-6,315,553	11-13-2002	Sachdeva et al.	
	AO	US-6,318,994	11-2001	Chishti et al.	
	AP	US-6,350,119	02-26-2002	Jordan et al.	
	AQ	US-6,350,120	02-26-2002	Sachdeva et al.	
	AR	US-6,369,815	04-09-2002	Celniker et al.	
	AS	US-6,371,761	04-2002	Cheang et al.	
	AT	US-6,409,504	06-2002	Jones et al.	
	AU	US-6,463,344	10-08-2002	Pavlovskaja et al.	
	AV	US-6,463,351	10-2002	Clynch	
	AW	US-6,471,512	10-2002	Sachdeva et al.	
	AX	US-6,512,994	01-28-2003	Sachdeva	
	AY	US-6,514,074	02-2003	Chishti et al.	
	AZ	US-6,540,512	04-2003	Sachdeva et al.	
	BA	US-6,602,070	08-2003	Miller et al.	
	BB	US-6,633,789	10-2003	Nikolskiy et al.	
	BC	US-6,665,570	12-16-2003	Pavloskaia et al.	
	BD	US-6,688,886	02-2004	Hughes et al.	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		Examiner Name	Ayal I. Sharon		
Sheet	2	of	5	Attorney Docket Number	018563-004620US

FOREIGN PATENT DOCUMENTS								
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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	BE	PCT	WO 98/32394		07-1998	Hultgren		<input type="checkbox"/>
								<input type="checkbox"/>

Examiner Signature		Date Considered	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/670,162
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				Examiner Name	Ayal I. Sharon
Sheet	3	of	5	Attorney Docket Number	018563-004620US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BF	"Simulating Stress on Jaws: Ansys Inc's Finite Element Analysis Software," <i>Tooling & Production</i> , (November 1996).	<input type="checkbox"/>
	BG	BOHM <i>et al.</i> , "A Survey of Curve and Surface Methods in CAGD," <i>Computer Aided Geometric Design</i> 1, pp. 1-60 (1984).	<input type="checkbox"/>
	BH	BOURKE, "Coordinate System Transformation," (June 1996) retrieved from the Internet << http://astronomy.swin.edu.au/~pbourke/projection/coords >>.	<input type="checkbox"/>
	BI	CARNAGHAN, "An Alternative to Holograms for the Portrayal of Human Teeth" 4th Int'l. Conf. on Holographic Systems, Components and Applications, pp.228-231, Sept. 15, 1993.	<input type="checkbox"/>
	BJ	Cyberware M15 3D Scanner. © 1998-2006, retrieved from the Internet: < http://www.headus.com/au/cyberware/m15.html >.	<input type="checkbox"/>
	BK	Definition for "Gingiva," retrieved from the Internet: << http://reference.com/search/search?q=gingiva >>.	<input type="checkbox"/>
	BL	DOYLE, "Digital Dentistry," <i>Computer Graphics World</i> , pp. 50-52 and 54 (October 2000).	<input type="checkbox"/>
	BM	DOYLE, "Doctors Use CAD/CAM to Take the Pain out of Extensive Dental Procedures," <i>Computer Graphics World</i> , 5 pages total (2000).	<input type="checkbox"/>
	BN	FOLEY <i>et al.</i> , "Fundamentals of Interactive Computer Graphics", Addison-Wesley Publishing Co., 514-533.	<input type="checkbox"/>
	BO	FÜTTERLING <i>et al.</i> , "Automated Finite Element Modeling of a Human Mandible with Dental Implants," WSCG '98 -Conference Program, retrieved from the Internet: << http://wscg.zcu.cz/wscg98/papers98/Strasser_98.pdf >>, 8 pages total.	<input type="checkbox"/>
	BP	GAO <i>et al.</i> , "3-D element Generation for Multi-Connected Complex Dental and Mandibular Structure." <i>Proc. Int'l. Workshop on Medical Imaging and Augmented Reality</i> , pp.267-271, June 12, 2001.	<input type="checkbox"/>
	BQ	HOJJATIE <i>et al.</i> , "Three-Dimensional Finite Element Analysis of Glass-Ceramic Dental Crowns," <i>J. Biomech.</i> , 23(11):1157-1166 (1990).	<input type="checkbox"/>
Examiner Signature			Date Considered

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				Art Unit	2123
				Examiner Name	Ayal I. Sharon
Sheet	4	of	5	Attorney Docket Number	018563-004620US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
	BR	MA, C.C. and CHEN, M.J., "Vertex-Based Shape Coding in Polar Coordinates for MPEG-4," Taiwan Area Network Conference, November 9-11, 1998, retrieved from the Internet: < http://tanet98.ndu.tw/TANET98/HOMEPAGE/paper/2b_1/2b_1.htm >.	<input type="checkbox"/>	
	BS	MA, C.C. et al., "Efficient Shape Coding Algorithm for Object-Oriented Video in MPEG-4," Int'l. Conf. on Consumer Electronics (ICCE '99), June 22-24, 1999, pp. 174-175.	<input type="checkbox"/>	
	BT	PAUL et al., "Digital Documentation of Individual Human Jaw and Tooth Forms for Applications in Orthodontics, Oral Surgery and Forensic Medicine" Proc. Of the 24th Annual Conf. of the IEEE Industrial Electronics Society (IECON '98), Sept. 4, 1998, pp. 2415-2418.	<input type="checkbox"/>	
	BU	Raintree Essix, < http://www.essix.com/magazine/defaults.html > downloaded from internet 08/13/97 Essix™ Appliances, 7 pages total.	<input type="checkbox"/>	
	BV	REDMOND et al., "Clinical Implications of Digital Orthodontics" <i>Am. J. Orthodont. Dentofacial Orthopedics</i> , 117(2):240-242 (2000).	<input type="checkbox"/>	
	BW	REKOW et al., "CAD/CAM for Dental Restorations - Some of the Curious Challenges," <i>IEEE Transactions on Biomedical Engineering</i> , 38(4):344-345 (April 1991).	<input type="checkbox"/>	
	BX	REKOW et al., "Comparison of Three Data Acquisition Techniques for 3-D Tooth Surface Mapping," Annual International Conference of the IEEE Engineering in Medicine and Biology Society, (1991) Vol. 13, No. 1, pp. 344-345.	<input type="checkbox"/>	
	BY	ROGERS, D. and ADAMS, A., <i>Mathematical Elements for Computer Graphics</i> , MacGraw Hill Publishing Co., 2d Ed. (pp. 426-450).	<input type="checkbox"/>	
	BZ	STAWSER, D. and CELLINI, J., "Training Manual of Ball State University Cyberware Model 15, 3-D Laser Scanner," December 16, 1999 retrieved from the Internet: < http://www.bsu.edu/classes/flowers2/training/m15/m15man.html >.	<input type="checkbox"/>	
	CA	VERSTREKEN et al., "An Image-Guided Planning System for Endosseous Oral Implants," <i>IEEE Transactions on Medical Imaging</i> , 17(5):842-852 (October 1998).	<input type="checkbox"/>	
	CB	WATT et al., "Advanced Animation and Rendering Techniques Theory and Practice", Addison-Wesley Publishing Co., 101-110.	<input type="checkbox"/>	
	CC	XIA et al., "Three-Dimensional Virtual-Reality Surgical Planning and Soft-Tissue Prediction for Orthognathic Surgery," <i>IEEE Transactions on Information Technology in Biomedicine</i> , 5(2):97-107 (June 2001).	<input type="checkbox"/>	
Examiner Signature				Date Considered

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				<i>Art Unit</i>	2123
				<i>Examiner Name</i>	Ayal I. Sharon
Sheet	5	of	5	<i>Attorney Docket Number</i>	018563-004620US

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	CD	YAMANI, S.M. <i>et al.</i> , "A System for Human Jaw Modleing Using Intra-Oral Images," Proc. of the 20th Annual Conf. of the IEE Eng'g. in Medicine and Biology Society," Vol. 2, pp. 563-566 (November 1, 1998).	<input type="checkbox"/>

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